DOCUMENT RESUME

ED 326 367 RC 017 920

AUTHOR Nachtigal, Paul; Haas, Toni
TITLE Restructuring Rural Schools. Finance Collaborative Working Paper #3.
INSTITUTION Education Commission of the States, Denver, Colo.; National Conference of State Legislatures, Denver, CO.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE Oct 88
NOTE 24p.
PUB TYPE Viewpoints (120) -- Information Analyses (070)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Change Strategies; *Consolidated Schools; Economic Change; *Educational Change; Educational Improvement; Educational Objectives; Educational Philosophy; Educational Policy; Educational Quality; Elementary Secondary Education; *Program Effectiveness; *Rural Education; *Rural Schools; *School District Reorganization; Small Schools

ABSTRACT

This paper describes the emerging debate on efficiency and program quality in rural schools, explores the strengths and weaknesses of rural district consolidation, and suggests policy options for redesigning rural education. An examination of economic trends, demographics, and philosophical changes regarding rural education's purpose puts educational changes into context. Increasing diversity in various areas of rural life tends to complicate educational planning and policy-making. The data suggest that there is no single future for rural America and its schools, but many different futures. Consolidation advocates argue that bigger schools mean better programs, but the evidence does not support contentions that educational quality is a function of size. Greater efficiency can be achieved by reducing costs or by raising output and its quality. False efficiencies are achieved by cutting costs and reducing quality. The challenge for rural schools is to offer not just standardization, but positive learning environments, as evidenced by a wide array of indicators. While measuring efficiency is difficult, successful small schools have taken steps such as establishing low pupil/teacher ratios, offering strong core curricula, hiring competent generalist teachers, and using local resources. Redesigned schools would be different from existing models in all respects, including governance, administration, mission, staff, curriculum, scheduling, and organization. The document describes experimental redesign programs in different parts of the country. Its recommendations include: (1) financing that is sensitive to local peculiarities; (2) incentive grants for local pilot initiatives; (3) appropriate instruction for school staff; and (4) encouragement for collaborative projects. (TES)

ED326367

The School Finance Collaborative

A Joint Effort of ECS and NCSL

working papers

RESTRUCTURING RURAL SCHOOLS

Paul Nachtigal
Toni Haas

FINANCE COLLABORATIVE WORKING PAPER #3

RC017920

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

RESTRUCTURING RURAL SCHOOLS

Paul Nachtigal
Toni Haas

FINANCE COLLABORATIVE WORKING PAPER #3

October 1988

The School Finance Collaborative
A Joint Effort of

The Education Commission of the States
and
National Conference of State Legislatures

with support from
Office of Educational Research and Improvement

1860 Lincoln Street, Suite 300
Denver, Colorado 80295

This paper was supported in part under a Field Initiated Studies Program grant, as administered by the Office of Educational Research and Improvement, U.S. Department of Education. It was prepared for the School Finance Collaborative, a joint effort of ECS and NCSL. The views expressed in this paper are those of the author, and not necessarily those of ECS, NCSL or OERI.

The Education Commission of the States is a nonprofit, nationwide interstate compact formed in 1965. The primary purpose of the commission is to help governors, state legislators, state education officials and others develop policies to improve the quality of education at all levels. Forty-eight states, the District of Columbia, American Samoa, Puerto Rico and the Virgin Islands are members. The ECS central offices are at 1860 Lincoln Street, Suite 300, Denver, Colorado 80295. The Washington office is in the Hall of the States, 444 North Capitol Street, Suite 248, Washington, DC 20001.

It is the policy of the Education Commission of the States to take affirmative action to prevent discrimination in its policies, programs and employment practices.

The National Conference of State Legislatures is designed to help lawmakers and their staffs meet the challenge of today's complex federal system. Its Office of State Services is located in Denver, Colorado; its Office of State-Federal Relations is located in Washington, D.C. NCSL serves the country's 7,461 legislators and their staffs. It is funded by the states and governed by a 54-member Executive Committee. NCSL has three basic objectives:

- To improve the quality and effectiveness of state legislatures;
- To foster interstate communication and cooperation; and
- To ensure state legislatures a strong, cohesive voice in the federal system.

The New School Finance Research Agenda: Resource Utilization in Schools and School Districts
Restructuring Rural Schools:

Paul Nachtigal
Toni Haas

Describes the emerging debate on efficiency and program quality in rural schools, explores the strengths and weaknesses of proposals to consolidate rural school districts and suggests workable policy options.

INTRODUCTION

The power and quality of rural education has been the subject of debate since the turn of the century. Rural areas were perceived as backward, burdened by traditions, and therefore disadvantaged as America moved from an agricultural to industrial country. As another transformation takes place and America moves from an industrial to information age, this paper describes the on-going debate about the efficiency and efficacy of rural schools in terms of current rural realities. It proposes a future scenario that takes advantage of rural strengths to create schools and communities that work together to prepare students for productive lives in the information age.

Ask anybody about rural education, and they will tell you about one-room schools, little boys and girls riding ponies to school, buildings with bathrooms and playgrounds outside, rote lessons and big children helping smaller ones. In fact, rural education policy has often been formed by images, stories, and anecdotes. As Jonathan Sher points out, government by anecdote causes a variety of problems. Stories portray a very selective slice of life and "span a time period from sixty minutes to sixty years ago."[1]

In fact, nobody knows for sure how many students attend rural, small schools. Best estimates range in excess of 9 million students, approximately a quarter of the nations total school enrollment. (These figures are conservative since many of the Southern and Western states are organized in county units with multiple rural school attendance centers at each level.) There are more than 15,000 school districts in the United States, and of these nearly 75 percent have fewer than 2,500 students total enrollment. Fifty-five percent of the nation's districts enroll fewer than 600 students. The median size high school in North Dakota is presently 68 students. When as seemingly simple a fact as how many students depend on rural schools for their education is not available, how many more complicated issues must rest on speculation, reminiscence, story and belief? This paper attempts to provide more definitive information about education in rural America, to assist policy-makers in their deliberations as they address issues of rural education which impact every region, every state in the country.

---

[1] Sher, Jonathan P. *Class Dismissed: Examining Nebraska's Rural Education Debate.* Nebraska Rural Community Schools Association, 3726 South 14th, PO Box 2003, Lincoln, NE 68502, March, 1988.

THE CONTEXT FOR RURAL EDUCATION

The facts begin with a definition of what rural means in 1988. This section looks at changes in economics, in demographics and in philosophies about the purposes of education in rural America.

In 1900, 60.4 percent of the population lived in rural America. By 1960, this percentage had dropped to 30.1%, although the actual number of rural Americans increased by nine million during those 60 years.[2] Rural population exceeded urban population until 1920; from 1920 to the present the number of rural people has remained remarkably stable at between 50 to 60 million, although the percent of the total population has shrunk from 60 to 25 percent. While the number of rural people has changed little, who they are and what they do has changed dramatically. In 1920 the farm population (32 million) comprised 63 percent of the rural population; by 1985 the farm population (5.4 million) had declined to nine percent of the rural population. Only one out of ten rural Americans is currently involved in farming .[3]

A recent study of the USDA reveals how much the rural economy has diversified. The study classifies the 2,443 rural counties in the country into eight different types according to their principal sources of income and/or employment. The types identified were:

1. Farming dependent counties represented 29 percent of non-metro counties (702 in all) concentrated in the Plains states and upper Midwest.

2. Manufacturing dependent counties represented 28 percent of non-metrocounties (678 in all) concentrated in the eastern fourth of the country, especially in the South.

3. Mining dependent counties represented 8 percent of non-metrocounties (200 in all) concentrated in the west from Texas to Montana and in the east in West Virginia and Kentucky.

4. Specialized government dominated the economy in 13 percent of non-metrocounties (315 in all) uniformly distributed across the country and including counties that house major public universities, military reservation, state capitals and so forth.

5. Persistent poverty counties represented 10 percent of non-metrocounties (242 in all) concentrated in Mississippi, Alabama, Tennessee and Kentucky. These are counties whose income has been in the lowest fifth every decade since 1950. They generally

---

[2] Dillman, Don A. and Donald M. Beck. Information Technologies and Rural Development in the 1990s. *The Journal of State Government*. Vol 1, No. 1, January/February, 1988.

[3] Hobbs, Daryl. *What Will Rural America Look Like in the Year 2000*. Office of Social and Economic Data Analysis, University of Missouri, Columbia, MO. 1988.

include high concentrations of minority population and low levels of adult educational attainment.

6. Federal lands represented 10 percent of non-metrocounties (247 in all) concentrated in the Western one-third of the nation. They generally have low population density but rapid population growth during the 1970's because of recreation opportunities they afford.

7. Retirement represented 21 percent of non-metrocounties (515 in all) concentrated in a strip from southern Missouri through Texas and Florida and in the Southwest. They have had exceptional population growth and that growth continues.

8. Ungrouped counties represented 15 percent of non-metrocounties (370 in all) represent sufficiently diverse income and employment sources that they do not fit into any of the above categories. They are about equally distributed across rural America.

The issue that emerges from this classification is how much rural planning and policy-making has become complicated by not only outmoded visions of what rural means, but also by increasing diversity. Rural localities, even within the same state, face greatly different prospects for future growth and development, and have the capacity for very different contributions through taxes and assessments, to support public education.

The economic diversity described above suggests that there is no single future for rural America. There will be many different futures. To better understand the influences on future rural development, it is useful to take a brief look at the past. Daryl Hobbs divides rural economic development into three fairly discrete periods:

1. From 1900 to roughly 1960 rural areas were dependent on natural resources (farming, mining, energy, timber, etc.). Largely because of automation, employment in natural resource industries has been declining for the past 25 years or more, even though overall production is as great or greater than ever. It is unlikely that there will be much future employment growth in natural resource industries.

2. The second period (1960-1980) was a period of rural industrialization. This was the time when many formerly urban manufacturing plants moved to rural areas because of lower costs of production., especially labor. Most of this growth occurred in the Southeast, and is now moving off-shore, in search of even cheaper labor. In addition, the kind of manufacturing that moved to rural areas (mass production of standardized goods) is declining both in rural areas and in the nation as a whole.

3. The third period (beginning in the 1970's and continuing) is much more based on information technologies and the production of services. These are the general growth sectors of the economy. They tend to be education intensive, smaller scale, more oriented toward custom production and heavily based on entrepreneurship and innovation. Because of information technologies (it is cheaper and faster to transport information than people or goods) these sectors are not limited in choosing locations by access to raw materials or even surface

transportation. Rural areas have potentially great advantages here, with significant quality of life factors such as community, space, lack of crowds, physical environment and pace.

In light of these trends, Hobbs concludes that rural growth and development in the future will depend more on how and what an area does to compete than on any particular natural resource or advantage of location.

These potentially positive development possibilities could not come at a better time for rural America. While, as the USDA breakout demonstrates, rural economies are diverse, over the last eight to ten years they have shuddered under blows in every sector. The agriculture dislocations happened in parallel with the collapse of the domestic energy and mining sectors. In North Dakota and Montana, among the most farm dependent states, severance taxes from energy resources accounted for over 29 and 25 percent of total State tax revenues.[4] Energy prices have tumbled and land prices in the Midwest are less than 50 percent of their peak values eight years ago.[5] The economic come-back that both coasts seem to be participating in has not spread to the rural parts of the country. The recession of the early '80's in concert with reduced Federal aid placed severe stress on states, forcing tax increases.

These conditions have serious and immediate implications for rural schools. The performance of a public finance system depends on underlying economic conditions and the tax structure employed to raise needed revenues. Three major problems face states in general and rural schools in particular, according to Chicoine and Hoke.

1. Expenditures, necessary to maintain and improve the educational system as advocated in the numerous reform documents, will increase. State fiscal capacity to respond is limited, particularly in states where school funding is dependent on property tax and land is being severely and regularly devalued.

2. Increased budged demands come on top of several years of state budget pressures. It is unlikely that states will raise tax rates in the near term causing state revenue growth to depend on general improvements in the economy.

---

[4] Chicoine, David L. and Gordon A. Hoke. *Rural Economies, Tax Structures, and Meeting the Demand for State-Local Government Services: A Focus on Local Schools.* in New Dimensions in Rural Policy: Building Upon Our Heritage. Studies prepared for the use of the Subcommittee on Agriculture and Transportation of the Joint Economic Committee, Congress of the United States. U.S. Government Printing Office, Washington: 1986.

[5] McCune, Shirley D. *McREL Meets Needs in the Central Region.* Mid-Continent Regional Educational Laboratory, 12500 East Iliff #201, Aurora, Colorado, 80014, 1987.

3. Finally, there is likely to be little help from outside. Federal inter-governmental aid is expected to continue to decline.[6]

Further darkening the fiscal picture for schools are two demographic trends, for while the numbers of rural residents has remained relatively constant, what they look like has and will continue to change. The first trend suggests that rural communities are growing older. Transfer payments are the major source of income in almost a fourth of the rural counties.[7] Older citizens bring their own capital and are prime clients for increased services. However, they may see their needs for public services in direct competition with the tax investment in public schools. This can result in lessening support for the schools, since older citizens have a very high voting rate. The second trend is increasing numbers of students entering school at risk for failure, whose educational needs tend to be expensive to serve.

A final change in the rural context is around changing philosophies about the purposes of education and the role of the school. Conflicting perspectives of the role of education in rural communities are emerging. Historically, rural education has been viewed as education for **emancipation**. Educational programs were designed to equip rural young people with the skills and attitudes to leave rural communities. With the decline of ready employment opportunities in larger urban areas and the deterioration of the quality of life, increasingly, rural people and rural communities seek education for **empowerment**, that is an education that enables them to make choices. If they chose to move to the city, they have the skills to successfully do so. However, if they wish to remain, their education has prepared them to create their livelihood, if need be, to stay in the rural community.[8]

At the same time the purpose of schooling is being reexamined in rural communities, the role and importance of the school as an institution is also being reconsidered. Rural schools, while the largest employer and purchaser of services in many rural communities, represent a net economic drain particularly in those states which rely heavily on local property tax for financing their schools. Local citizens contribute tax dollars and their children, and lose the human capital investment when those children seek employment and live elsewhere. It is a matter of local pride that students are as well prepared in small schools as students who live in urban and suburban areas, yet rural citizens are beginning to question the necessity of their children "graduating with a diploma in one hand and a bus ticket in the other".

ADDRESSING THE RURAL EDUCATION PROBLEM: THE PAST

The Consolidation of Schools

---

[6] Chicoine and Hoke, op. cit.

[7] Bender, et. al., op. cit.

[8] Ford Foundation Task Force Meeting, June 14-16, 1987, Denver, Colorado.

Consistent with the urbanization mentality which has driven public policy from the turn of the century, the traditional policy response to improving the education and life chances of students living in rural areas has been to deliver services through organizations that looked as much as possible like city schools. Since the largest, most visible difference is size, this meant consolidating rural schools, making them larger.

Urban areas needed schools that could indoctrinate large numbers of immigrants, turning them into productive factory workers who were compliant, did repetitive, boring tasks and were no threat to the social order.[9] Convinced that the production efficiencies realized from the assembly line could be adapted to schooling, public education with leadership from urban areas began to incorporate the principles of specialized teachers and standardized curriculum and classrooms along with the rigid time schedules that seemed to be working well in the mass production work place. Large numbers were needed to achieve the efficiencies and economy of scale of the factory model, so consolidation of rural schools and common standards, including adopting the same length school term became the public policy strategy for rural school improvement.[10]

The 200,000 or more one-room schools were first merged into town schools, and then into larger, multi-community school districts. The number of school districts was reduced from approximately 128,000 in 1930 to 36,000 in 1960 and fewer than 16,000 today. The system, consistent with the movement of society from community control to a mass society[11] shifted the control of schools from communities to professionals. As consolidated rural schools became larger, they took on more and more of the characteristics of urban schools and their programs became less and less relevant to the local needs and circumstances of the communities in which they were located. For the most part, the curriculum evolved into a text-book driven, college preparatory program, ill-serving those students who were not college bound.

While school consolidation represented a logical reflection of improved transportation and the movement of the population from the countryside to the towns and cities, as a policy option, it has largely reached the limits of its usefulness. While there are still some small districts (particularly K-8, K-6 and 9-12 districts that exist primarily for tax advantages) that could be consolidated, the round of consolidation in the 1950's and 1960's reaped the

---

[9] Hutchins, C. L. Dear Colleague letter in *Redesigning Rural Education: Ideas for Action*. Mid-Continent Regional Educational Laboratory, 12500 East Iliff #201, Aurora, Colorado, 80014, 1988.

[10] Nachtigal, Paul and Daryl Hobbs. *Rural Development, the Role of the Public Schools*. Paper prepared for the National Governors' Association, May, 1988 and available from NGA, 444 Hall of States, Washington, DC, 20208.

[11] Dillman and Beck, op. cit.

cost savings that could be made. There is no good data that suggests that further consolidation can be justified as either a school effectiveness or economic issue.[12,13]

School Consolidation: Quality and Effectiveness

Most remaining consolidation advocates suggest bigger schools provide better programs, a better education for students. Sher points out that nearly everyone (both pro and anti-consolidation advocates) assumes enrollment size and educational quality are very closely related but "remarkably little has been done to resolve this matter through appropriate and reliable statewide evaluations of education." He then presents an analysis of input, 'through-put' and output measures, which we will recap briefly below:

In terms of **inputs** (physical plant; the supply of books, materials and equipment; highly-credentialed teachers, a variety of specialist staff members and a strong breadth and depth of course offerings), the evidence reveals that once a basic floor has been established, in and of themselves these inputs do not have a significant effect on student performance and other educational outcomes. They are not even in the same league as native intelligence and family background as predictors of academic aspirations, motivation and achievement.

Through-puts are those environmental and process factors that promote educational excellence. The underlying theory is simply that what resources schools have are less important than what schools actually do with whatever resources they may possess.

Research identifies a fairly consistent set of themes: strong, positive leadership; high expectations of student and teacher achievement; respectful relationships among students, teachers and administrators; individualized instruction and attention; an emphasis on academic basics; parental/community involvement and support; fair and frequent feedback to both students and teachers on performance (emphasizing positive reinforcement of success and progress); a friendly, but businesslike, classroom and school climate; a healthy balance of activities fostering the intellectual, physical emotional and social development of students; and a tolerance for individual initiatives and for trying new approaches to learning.[14]

---

[12] Hobbs, Daryl. Rural School Improvement: Bigger or Better? *The Journal of State Government*. Vol. 61, No. 1., January/February, 1988.

[13] Sher, op. cit.

[14] Boyer, Ernest, *High School: A Report on Secondary Education in America*. New York: Harper and Row. 1983; Ron Edmonds and J. R. Frederiken, *The Search for Effective Schools*, Cambridge: Harvard University Press, 1978; John Goodlad, *A Place Called School*, New York: McGraw Hill, 1984; Sara Lightfoot, *The Good High School: Portraits of Character and Culture*, New York: Basic Books, '983; Michael Rutter, et.al., *Fifteen Thousand Hours: Secondary Schools and Effects on Children*, Cambridge: Harvard University Press, 1979.

None of these elements of excellence are beyond the reach of small, rural schools and a strong case can be made that small schools have advantages in the development and refinement of these attributes. Items such as parental and community involvement and support are characteristic of most small rural schools. Similarly the traditional emphases on academic basics and a friendly, but businesslike climate, give these schools an important head start. The criterion of individualized instruction and attention is more likely to be met in a small school because of the low pupil/teacher ratio. In sum, "the good news is that every single one of they key factors is readily attainable by small rural schools--without consolidation, without a major infusion of new money and without having to wait for new technologies."[15]

Finally, **outputs** are thought to directly measure results. The problem here is that virtually no states have comparative data. In Colorado, for instance, the first state-wide testing program disclosed that student achievement scores showed no bad effects of size: some of the smallest, most rural schools had students with the highest ranks. What does seem clear is that poor districts and districts with large numbers of poor children, do not have test scores as high as those in districts with more resources, but this is not a measure correlated with size.

Since achievement or performance test score data are not systematically collected in most states, other output measures need to be considered. One of these is the "holding power" of schools, that is how good are different types of schools at motivating students to stay enrolled until they graduate? Most rural, small schools do well on this measure, and much better than urban schools.

A final output measure, a proxy to be sure, are student scores on college entrance examinations such as the SAT and ACT. In Nebraska, for instance, the smallest schools (with 1-24 graduates) and the largest schools (with 900+ graduates) produced exactly the same average scores.[16] There is neither hard evidence, nor a persuasive argument, supporting contentions that educational quality is a function of size.

School Consolidation: Economy and Efficiency

If small schools have, within their reach, all of the variables associated with effectiveness and if the output measures (how many students stay in school, how students from the smallest schools compare with others in the state on achievement, performance, and college entrance tests) all show small school students reaching the highest degrees of excellence, then the arguments for consolidation revolve around economy and efficiency. Advocates of consolidation argue that small rural schools cost too much and do not spend what they have wisely, thus wasting scarce public dollars. The public trust makes this a particular concern to state legislators, and we will spend some time on it below.

---

[15] Sher, op. cit.

[16] Ibid.

The basic question about economy and schools is "Can the schools be operated for less money?" The answer for all schools is a resounding YES! For example:

- In Nebraska the schools could reduce costs by well over 35 million dollars a year by getting out of the transportation business.
- Millions upon millions of dollars could be saved by eliminating all school sports and extra curricular programs.
- Enormous savings could be achieved if state legislators mandated, for example, that no teacher could have fewer than thirty pupils.
- All vocational training could be eliminated, because the private sector is, after all, responsible for training their own employees.
- Course offerings (art, music, drama, foreign languages) not tested on the SAT or ACT could be eliminated.
- Schools could eliminate all administrators but one per school, as well as all support staff, media specialists, librarians, counselors.
- Public elementary and secondary schools could take a leaf from the books of public universities and begin charging tuition and making students pay for their own books and materials.[17]

Any real savings to be gained by merging some small districts or schools is mere "chicken feed" when compared to the potential savings gained by any one of the above measures. If the primary goal for legislators is to save money, then the place to start is in one of these really big categories of school expenditures.

There would be a heavy price to pay for this kind of short-sighted frugality. Legislators recognize that their primary responsibility is to ensure that all the state's children have access to good public schools. Supporting the best schools that resources permit, rather than the cheapest ones imaginable, is wise investment in the future of the state and its economy.

As these examples should make clear, a genuinely "hard-nosed" pursuit of any and all economies in public schooling very quickly could become a risky, and educationally counter-productive, course of action. Public policy-makers might better turn their attention to efficiency, rather and economy.

Efficiency refers to the relationship between cost and quality. There are two ways in which efficiencies can be achieved: first, by holding the quality/output constant while

---

[17] Ibid.

lowering the cost; or by holding the cost constant while raising the quality/output. In this analysis, we must be wary of false efficiencies, that is cutting costs but ending up with an inferior yield or product.

Valid measurements of a school or school district's efficiency are greatly complicated by the absence of tangible outputs and standard definitions of quality in the world of education. This also makes legitimate comparisons among schools on the basis of efficiency much more difficult than they may seem at first glance. Per pupil expenditure calculations inherently, and inevitably, discriminated against rural school systems. There are simply too few young people in most rural areas to make rural schools look good on the per pupil cost yardstick. A variety of costs remain fixed without regard to the number of students among whom these costs can be spread. Transportation costs also point out the extent to which the necessary costs of a rural education are mislabeled as inefficient through the use of the per pupil cost per yardstick.

In spite of these apparent handicaps a look at a gross measure of costs in Missouri, operating expenses per student, the mean costs per student of districts of various sizes are surprisingly similar.

Ave Daily Attend.	# of Dist	Mean	Low	High
Less than 500	269	2,801.0	1,851.0	4,765.1
500 - 10000	121	2,613.7	1,926.1	5,217.5
1,000 - 2,499	95	2,581.2	1,699.3	7,002.3
2,500 or more	55	2,981.3	2,069.6	5,146.4

These figures are consistent with research studies on economies of scale which show small districts and large districts to be slightly more expensive to operate. What is worth further study is the range of expenditures within each of the size categories.[18]

The small school secret for achieving good results at a reasonable cost (the answer to the question, efficient at doing what) has been to:

- emphasize individualized instruction and low pupil/teacher ratios;
- ensure direct participation in school activities by virtually every student;
- offer a strong core curriculum;
- hire competent generalist teachers;

---

[18] Fox, Wm. F.

- take advantage of close connections with the local community; and

- simply do without a variety of resources taken for granted in larger schools.

ADDRESSING THE RURAL EDUCATION PROBLEM: THE FUTURE

Standards, Yes; Standardization, No

If taxpayers and legislators agree to increase their financial support of the public schools, they have a right to demand heightened levels of educational quality, based on genuine measures. These measures should not be either superficial proxies (including such inputs as shiny new buildings or a dazzling array of course titles) or any single indicator (such as ACT scores). What is needed is a statewide evaluation process emphasizing two areas:

1. The extent to which schools actually are behaving in accordance with the research-validated elements of effective schools and positive learning environments (described earlier), and

2. The actual performance of schools on a diverse set of output measures, ranging from dropout/graduation rates to test scores, and from student/parent/teacher evaluations to appropriate competency tests that go be simple "paper and pencil" examinations and the recall of facts.

Taking this challenge seriously will require a new set of actions on the part of both local and state education officials. It demands a major statewide research, development and data collection effort. It also requires far more local cooperation and participation in both the design and conduct of such work than has been true in the past. What all this boils down to is the creation of appropriate standards for the behavior and performance of public education institution, and a rational, systematic non-anecdotal method for helping schools discover both how close they are coming to meeting these standards and what steps they might take to improve their quality.

What it does not imply is a state-level push for school standardization. Standardization is a misguided notion that there is only one way to achieve these educational standards, that there exists "One Best Method" of schooling that must be used by all people everywhere in all circumstances. This idea, a reflection of the traditional metropolitan bias lurking in the minds of educators and policy-makers, is extraordinarily arrogant. It greatly exaggerates the degree to which anyone firmly understands what is most educationally appropriate for what children under what circumstances. At the same time, it ignores how much we do know about different learning styles, the value of alternative pedagogies, and the need to treat children as individuals, rather than pretending they are all the same. For better or worse, education is still much more of an art than a science. It requires a willingness to search for ever-better ways of promoting effective learning and all the other positive outcomes our society expects from its public schools.

Redesigning Rural Education: A Vision For The Future

America is suffering from a terrific failure of imagination around the issues of quality education. What is sorely lacking at the moment is a compelling vision of what quality rural education might encompass. The remainder of this paper begins to rough out the dimensions of such a vision. We begin by discarding the deficit model that evaluates rural settings in terms of what they lack, and concentrate instead on their strengths. The following discussion is base on a recognition of the diverse rural reality which constitutes America's countryside. It is also based on the growing recognition from research as well as practice that substantive restructuring will happen from the "bottom-up", not the "top-down". It is only when communities take control of this redesign that education can be tailored to the unique conditions of each locality. We are not, therefore, constructing another one-best-system for rural America. Rather, we wish to establish a framework and support structure which will facilitate the redesign of more effective schools where ever they might be located.

Schools, regardless of size and location, have a given set of components and perform certain functions. How those functions get carried out needs to be different for different locations.

Mission

Existing Schools - Schools, whether clearly articulated or implied have an educational mission. For rural schools, that mission has traditionally been fairly narrowly defined, e.g. providing a good basic education for those individuals between the ages of approximately 5 to 18. Educational programs are designed for emancipation, that is equipping students with the skills and knowledge to continue their education and or move from the local community to areas in which there are larger labor markets. Because of state regulations, which have been defined by the one-best-system, and because of the limited numbers and resources of the small school, the curricula that results in rural communities tends to be heavily college prep, leaving non-college bound students less well served.

Redesigned Schools - The mission of the school is expanded to serve students of all ages, including pre-schoolers and adults as well as the traditional student population. The mission would be refocused to include the empowering of students, giving them the skills, knowledge, attitudes to make choices about staying in the community as well as leaving.

Depending on the availability of other social service agencies, the school, often the last viable institution in rural communities, would become the general store of public services, including health, economic development, welfare and other social services.

Governance

Existing Schools - Because of the centralization of control which has accompanied the urbanized one-best-system, the importance of local boards as a policy making body has decreased. With fewer and fewer real decisions to be made, boards have tended to drift to special interest policy making and or become more involved in the administration of schools.

Redesigned Schools - Because of the need to keep schools tightly linked and responsive to the unique conditions of each community, and because states will need to depart from a centralized one-best-system policy structure, local boards will again take on central importance. Local control will once again be a cornerstone of the redesigned rural school. In fact, the governance structure will need to be expanded as the school broadens its mission, providing representation of all interests and segments of the community.

Administration

Existing Schools - With centralization, has come increased needs for administration. Full-time superintendents and principals are expected even in the smallest school systems. The size of the administrative staff can be predicted by the degree to which states legislate control over local school programs.

Redesigned Schools - The need for strong accountability and related reporting procedures are necessary to fulfill the public trust. With the development of a sophisticated set of out-come measures to be met by all schools, discussed earlier, the plethora of rules and regulations concerning "in-puts" and "through-puts" can be reduced. States need to be concerned about the quality of the school's product, not the process used to achieve that level of quality. With the reduction of compliance guidelines for operation, the central office administrative functions will be reduced and could be contracted to a regional or multi-district agency, thus eliminating the need for a superintendent for each rural district.

Curriculum

Existing Schools - The curriculum in rural schools has become standardized, the courses more and more specialized, text book driven and increasingly irrelevant to local community needs. Students know more about how the state and national government works than their own town council. The operation of the Supreme Court is better understood than the office of the justice of the peace. Students are learning more and more about those things over which they have less and less control.

Redesigned School - The curriculum of the restructured school would begin with a community focus, integrated so as to assist students see the inter-relationships between the various content areas, e.g. math and the social sciences, science and the arts, etc., with an emphasis on learning to learn. Rote learning would be replaced with higher order thinking skills. Computer technology gives us the tools to move from a curriculum that is linear, e.g. progressing from the simple to the complex, to a curriculum which deals directly with the complexities of our environment. Such a curriculum will insure the development of problem-solving skills needed for the emerging technological society.

The curriculum is dynamic and changes in response to emerging interest, changes in the environment. It includes civic responsibility and community service. The curriculum includes core, common skills, but the time it takes to complete it and the precise components after the core skills are mastered differ because they are designed for individuals. Instruction recognizes differences in learning styles. Assessment is based on individual achievement and reports of community observers as well as paper and pencil measures of competence.

Course Delivery

Existing Schools - Typical instruction in existing schools consists of a teacher with about 30 students, graded by age, in a classroom for 55 minute periods. Instructional materials tend to be limited to the text-book, work sheets or paper and pencil activities. Instruction is dominated by the teacher talking and the students listening.

Redesigned School - Educational experiences would be provided in a wide variety of ways with a heavy emphasis on experiential learning. Because learning is experiential, taking place in the real world, and the curriculum more integrated, groupings of students will be more real, e.g. multi-age and multi-interest groupings. The use of more general grouping patterns will allow for more efficient staffing patterns not possible with the one-best-system.
Because the community is the focus of study, students will learn about the importance of history by becoming historians of their own community. Economics and social science come alive as students begin by collecting and analyzing data about the local social and economic conditions. Much of science, energy, food production, the ecology, biology, are taught in the laboratory that exists in the schools surrounding environment.

Technology is an integrated component of the educational delivery system. The master teachers are shared among clusters of neighboring schools via fiber-optic or micro-wave interactive video. Specialized courses that can be offered no other way will be brought in over satellites. Computers serve as learning tools for simulations and handling the data of real world learning experiences.

Instructional Staff

Existing Schools - Teachers are specialized, expected to be the source of knowledge. They served as the giver of information, students are the receivers of information. The system is not set up to make good used of "experts" who are not properly certificated.

Redesigned Schools - Teachers are generalists, educated in ways to help students find and understand how to use information. They are facilitators of learning rather than repositories of content. This does not mean that they need not know content. Being substantially grounded in a field is necessary to guide students in the study of that content.

Scheduling

Existing Schools - The school schedule is ridged and clearly defined. A six or seven class-period day, meets five (in some cases four) days a week for approximately 180 days. Learning takes place during these school hours.

Redesigned Schools - Courses are taught in longer blocks of time, for most courses a minimum of two hours, making more efficient use of instructional time and allowing students to move beyond the school walls for learning. Schedules would be flexible to allow for extended learning time around field activities or projects. With electronic networking and the use of computers for instruction, daily attendance at school may no longer be necessary. With a shift from "time-based" to "outcomes" based measures of

student achievement, meeting the schedule and being physically present in school becomes less important.

Students

Existing Schools - Students are individuals enrolled in school from Kindergarten, (in some cases pre-school) through grade twelve. You are a student or you are not. There is little provision for part-time arrangements.

Redesigned Schools - The lines between who is a student and who is not are blurred. Schools may offer day-care where some formal learning takes place. High school students may elect to be part-time students combining learning with work. Earning a high school diploma can take either more or less time than 12 years. Adults are served by a wide variety of job related, life enrichment, or leisure time activities. Adults will be integrated into many instructional options currently reserved only for traditional high school students.

School Organization

Existing Schools - School districts operate as autonomous/full-service organizations. With the exception of special education, each district is expected to offer all the functions and learning opportunities needed by the local community.

Redesigned school - Districts, while preserving their identity and control through local boards, will form consortia with other districts, institutions of higher education, and private sector agencies to provide the various functions of schooling which cannot effectively and efficiently be provided by a single district. For instance, advanced placement programs are offered by community colleges rather than duplicated by local districts; contract arrangements for vocational education replace expensive vocational facilities.

Rural Schools and Community Development: An Example

One vehicle being used by rural schools to begin the redesign process is community development. Earlier we talked about the purposes of rural education shifting from an exclusive emphasis on emancipation, or equipping students to leave town and seek success elsewhere, to the inclusion of the notion of empowerment, or giving people the tools they need to stay in the community. In a seven state study in the Midwest, rural youth reported that about half of high school graduates prefer to live on a farm or in a small town, while generally less than 10 percent would prefer to live in a city. Regardless of school size, graduates report that the thing they like least about their community is that there are few job opportunities.[19]

By expanding the mission of the school and focusing the curriculum on the community, the school assumes the responsibility for preparing students to create jobs, rather than just to get jobs, working for someone else. The tight links between school and community in rural areas become an asset to both. Experiments with these ideas are springing up throughout the countryside.

---

[19]20 Jerry Horn cite

The idea is simple. Schools teach students how to study the community, survey the residents for needs and purchasing practices, discover niches where needs are going unmet locally, write business plans, attract capital and begin businesses, all while they are attending class and working toward graduation. Students are the workers and owners, and the operating businesses, when able to function independently, move out of the school and operate as does any small business. This makes room for new businesses to begin. Four examples are described below.

In rural **Georgia**, Paul Delargey and his students have more than eight years experience implementing this idea. They have begun (and spun off) two daycare centers, a feeder-pig operation, a construction business and developed and are operating an old train and depot as a popular tourist attraction. Their latest project is to revitalize the sheep industry that died when Sherman marched through Georgia.

In **North Carolina**, Jonathan Sher who directs the Rural Education and Development, corporation and the University of North Carolina's Small Business and Technology Development Center has worked with pilot schools developing a silk screening and tee shirt business, a small boat rental and a restaurant. As an example of the scope of potential businesses, the restaurant involves a Methodist minister and three teachers helping a tri-racial group of rural high school students create a delicatessen in St. Pauls, North Carolina. Located on Interstate 95, the Way Off Broadway deli opened for business in July of 1987. Its first-rate sandwiches, kosher pickles and frozen yogurt are sought out by both local residents and interstate travellers.

Perhaps the most famous example of school-based enterprises is also in **Georgia**, at Rabun Gap. There for twenty years Eliot Wiggington and his students have created a foundation called Foxfire that researches, writes and publishes books, records and manufactures records, provides untold hours of restoration work on buildings and log cabins in what has become the Foxfire compound, and participated in a broadway play and made-for-television film, based on their research.

Mid-Continent Regional Educational Laboratory (McREL) is involved with the Black Hills Special Services Cooperative and eight West River **South Dakota** schools to explore ways that the schools can play a more central role in community economic development. Begun just last fall, this project has discovered, for instance, that students attending Custer (SD) high school, enrollment 280, have more than a half a million dollars in discretionary money each year. A research and development course in Belle Fourche (SD) surveyed their community and discovered 364 businesses. Another school taught students community survey techniques, and the resulting data will form the basis for an application to the federal government for low cost housing for the elderly. This summer, teachers from each of the sites will gather in a graduate credit course being offered at Black Hills State College to write an entrepreneurship curriculum.

These projects represent a vision that goes well beyond our current urban notions of the role of a school, incorporating many of the redesign features spelled out above. In general the redesigned rural school would serve as a meeting of place for citizens, and indeed be the social center of the town, offering a full range of social and educational services. A grandmother who lives out in the country would be able to catch the school bus in the morning with just a one-day call ahead. Arriving at the school she would keep her

monthly appointment with the County Nurse, ask a lawyer doing *pro bono* consultation about her will, collect her social security supplemental benefits, exercise with some friends her own age, have a hot meal, teach some third graders how to knit and see her grandson in his first band concert.

The redesigned rural school functions as the center of a learning community, and is a healthy organization for all its workers: students, teachers, administrators, support staff, and community members who are also taxpayers. Decisions are made in a consenting, participatory style and it is an easy glide from learner to teacher, a shift that everyone makes several times a day. The curricula encompasses adult education for vocational as well as avocational interests, and people are encouraged to drop in, not drop out. The building serves as a cultural center and historical repository, but sees itself connected to the communities future as a partner in development. Part of its role is to interface with other public service programs: OSHA, JTPA, SBA, social and health services. The school belongs to the community, and is constantly looking for ways to share its resources. Faculty consult with local businesses, about data processing, accounting and legal rules and regulations. Short courses and classes provide vital information on crucial issues, close to home.

IMPLICATIONS FOR SCHOOL FINANCE AND PUBLIC POLICY

A major thesis of this paper is that rural America is a complex environment, different in significant ways from urban America and encompassing great variations within rural itself. Rural America represents a segment of society whose problems do not lend themselves to simple solutions. While policy makers are to be commended for their interest in legislative initiatives to reform education, existing measures fall short of what is needed for rural education. We have tried to show that, whereas, school consolidation had a place in public policy as a way of improving rural schools in the past, it is not a useful policy for meeting the needs of rural America in a technological age as we move into the 21st Century. What is needed is a redesign of rural education. The implications for public policy and school finance are as follows:

1. Policy decisions for rural school redesign must be based on good information about rural reality, not anecdotes. While states are data rich, they are information poor about the status of rural education. Existing data has not been organized in a fashion that can inform policy on rural school performance, teacher quality and availability, financial needs for the required educational services or sources of support. We recommend that state agencies be directed to create an integrated data base which can inform future policy decisions about rural education.

Example: The state of Missouri has begun to look at its data base needs in connection with the development of a new school classification (accreditation) system which would, in addition to providing better information on school quality, eliminate some of the "urban bias" in the existing system, e.g. the bigger the more likely all the current in-put standards can be met. Currently the data from the education department is not in a format to provide the support for a new system. Until the department can create such a system, this service is being made available by the University of Missouri. An interactive data base will be essential in supporting a state system which provides for the diversity which will result from redesigning rural schools.

2. States have both legal and moral responsibilities around equity and quality of life issues. In order to fulfill these responsibilities we recommend that the most enlightened leadership of the state be charged to develop quality/performance standards which are to be met by all public schools, standards which go beyond standardized measures of student achievement and include information on drop-outs, student follow-up data, etc. Once established, rural schools could be freed from the operational constraints currently imposed by accreditation and other state regulations, allowing them to redesign their programs to capitalize on the inherent strengths of rural schools to meet those standards.

Example: A number of states are attempting to move to out put or performance based standards for the public schools. As yet, this author is not aware of any states that have completely implemented a system which would allow districts to depart from traditional regulations if adequate student performance is achieved. Again, Missouri is moving in this direction. The addditon of **throughput** and **output** criteria to the **input** standards, will make it possible for rural schools who do well on process criteria, e.g. those identified in the effective schools literature and described earlier in this document; and well on product criteria, e.g. student achievement, drop-out rates, etc., to still reach the highest level of distinction.

3. School finance formulas need to be redesigned to be sensitive to rural peculiarities and assure that essential educational functions are available for all students regardless of where in a state that student happens to live. Finance formulas must also be structured with a recognition that these functions can best be carried out differently in rural settings than in urban settings. Given the apparent linkage between school performance and socio-economic status, particularly prevalent in the "persistent poverty" counties, differentiated resources need to be made available not unlike those provided in court-ordered desegregation cases.

Example: Colorado's proposed school finance legislation places the states districts into eight different categories ranging from core city to urban-suburban, to outlying city to rural, to small attendance areas. The plan recognizes that certain educational functions must be provide regardless of size or location of the district. It also recognizes that these functions may cost more to provide in some settings than in others. It then attempts to equalize the resources available for those educational functions across the schools in each of the eight categories.

4. Incentive grants along with experimental school guidelines should be established to facilitate pilot rural redesign initiatives. State education agencies with their traditional regulatory role will need to publicly promote and support such initiatives. The supervisory responsibilities of the state will be different as we move from a uniform system to a differentiated system of schooling.

Example: Washington State has created a program "Schools for the 21st Century", a competitive program which will fund 21 sites in their efforts to restructure schools. The schools winning the competition will, upon submitting the proper applications, be exempt from all existing rules and regulations except for those pertaining to health and safety. Incentive grants of approximately $50,000 will be made available for each project. The guidelines call for geographical distribution of the successful applicants. Note: The small rural schools, most in need of restructuring generally do not have the resources, (time and

expertise) to successfully compete for such programs. Initiatives are needed specifically for rural schools.

5. To support the "general store" notion of service delivery, an inter-departmental task force will need to be established at the state level to articulate and avoid redundancy of program delivery to rural communities. Larger urban areas are capable of reproducing a parallel bureaucracy to that at the state level, rural communities are not. School financing will need to be seen as one piece of multiple funding sources to provide the range of services required in rural communities.

Example: Initial efforts were started under the previous administration at the Federal level to establish communications between the various agencies concerned with rural America. The Rural Inter-agency Task Force met frequently for communications purposes. Neither program changes nor funding patterns have yet followed. The author is not aware of similar efforts at the state level.

6. Redesigning rural schools is not a task that can be accomplished readily by an individual school district. The technical assistance, moral support and effective use of outside resources can best be accomplished through the formation of clusters of neighboring schools, linked with resources from intermediate service agencies (where they exist), institutions of higher education and appropriate agencies in the private sector. Development funds in relatively small grants will be needed to cover the expenses of this developmental process.

Example: The Mid-continent Regional Educational Laboratory has developed and implemented a "cluster strategy" for rural school improvement, working at a range of issues from the implementation of technology, staff development, revising the school curriculum, to involving the rural school in community development. Small amounts of discretionary funds have been made to these clusters through the Laboratory to cover items such as consultant expenses and travel.

7. Incentives need to be provided for institutions of higher education for the preparation of rural teachers, administrators, and other social service personnel interested in working in the redesigned rural schools. Current programs are generic at best, and often carry an urban bias which views finding employment in rural communities the least desirable option.

Example: Kansas State University, through its Center for Rural Education and Small Schools, has been developing a special teacher preparation program for teachers interested in working in rural communities. Other universities, notably Colorado State University and Brigham Young University, have incorporated an extensive "rural experience" into their teacher training programs.

8. Incentives should be built into finance formulas encouraging neighboring districts in the establishment of collaborative arrangements for sharing resources, personnel, and services including the use of technology and electronic networking. Forming such clusters results in achieving many of the hoped for advantages of consolidation while continuing to support the integrity of the local community.

Example: Minnesota has been a leader in the development of incentives for inter-district cooperation. Earlier legislation on "sharing/paring" provide additional resources for

neighboring districts to cooperate. More recently, "education district" legislation provides incentives for clusters of schools to band together for the purpose of sharing services ranging from administration to course delivery for special populations, day care, planning, post-secondary vocational programs, etc. Institutions of higher education are encouraged to be a part of these clusters.

9. Since existing funding formulae are based on a "one-best-system" model of schooling the factors driving those formulas may be very different than the factors driving a finance strategy for redesigned rural schools. A research and development support function will need to be funded to work along side the redesign efforts, identifying the real costs of such a system to serve as the basis for a new funding scheme.

While the design components laid out earlier are most needed in rural schools, many of them would improve the operation of urban and suburban schools. Because of the inherent flexibility of small size, rural schools provide an ideal laboratory for developing new programs. An investment in rural school redesign would have useful applications in larger schools as well.

The public school system was designed for an emerging industrialized nation. It has served the country well. We are, however, entering a new age which has particular promise for the rural towns and that half of the public school system which is currently being served least well. Further efforts to just improve rural schools will not do, a redesign is necessary.

END

U.S. Dept. of Education

Office of Education
Research and
Improvement (OERI)

ERIC

Date Filmed

March 29, 1991